

BLUE CAST _ Dental Gray - For all LCD 3d printers

PRODUCT FEATURES

HIGH ACCURACY AND DIMENSIONAL STABILITY

SUITABLE FOR VACUUM FORMING (Thermoforming, Vacuum Forming and Pressure Forming)

DIES and DENTAL PROTOTYPES

MATTE FINISHING FOR BETTER DETAILS

Dental Gray resin have matte finishing with a gypsum-like texture. The new resin is very easy to scan without use of coating spray. The shrinkage is negligible thanks to the inside nano ceramic and high level of detail suitable for accurate modeling of teeth and gums. The resin available in gray color has been developed according to the requests of a dental laboratories. Dental Gray is one of the best resin for all dental application: is not meant for intraoral use.

The chemical formulation don't contain dangerous monomers and has not been classified as carcinogenic under EU legislation. The resin is odorless and it is safe to print when used in accordance with our MSDS instructions.

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QUICK START GUIDE FOR LCD PRINTERS

BlueCast Dental Gray LCD resin is fully compatible with all LCD printers like Phrozen Shuffle, XL, Anycubic Photon, Wahnaho D7, D8, Micromake 2017 L2, EAST Micromake L2, X-CUBE LCD, Vodainfo Tech. LCD, Xayav Model V, etc (405nm).

For best results we suggest to use a resin tank provided with high quality FEP (FEP 100 OR 127 HD are suggested).

In case of particular climatic conditions (such as in case of room temperature inferior to 18°C) it is suggested to preheat the resin. If the resin has been sitting in the tank, use the putty knife to ensure it is thoroughly mixed.

It is suggested to filter the resin before each use, in order to avoid any damage to LCD screen.

The platform adhesion is perfect and permit to print multiples files in the same time.

HOW TO PREPARE THE PRINTING FILE

With BlueCast Dental Gray you can easy arranging the models directly on the platform: you will save resin and time.

It is also possible to print allowed models. When you do this remember to make the drains holes to permit the resin exit and avoid the suction effect.

For the dies and allowed models supports is suggested to use a medium preset: pilar size 1mm (diameter) / tip size 0.6mm (diameter).

For DIES we suggest to set the gap/tolerance at 30u



SUGGESTED PRINTING SETTINGS

Pay attention, the suggested settings can slightly change according to the machines maintenance conditions, the life time and fep used

Phrozen Shuffle

BURN IN LAYER
NUMBERS OF LAYERS: 5
LAYER THICKNESS: 50u
CURE TIME: 70 SEC
WAIT BEFORE PRINT: 5 SEC
WAIT AFTER PRINT: 0.5 SEC
LIFT AFTER PRINT: 5 mm
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER
LAYER THICKNESS: 50u
CURE TIME: 11 SEC
WAIT BEFORE PRINT: 1.5 SEC
WAIT AFTER PRINT: 0.1 SEC
LIFT AFTER PRINT: 4 mm
WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 180 u/SEC

Phrozen XL

BURN IN LAYER
NUMBERS OF LAYERS: 5
LAYER THICKNESS: 75u
CURE TIME: 55 SEC
WAIT BEFORE PRINT: 5 SEC
WAIT AFTER PRINT: 0.5 SEC
LIFT AFTER PRINT: 5 mm
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER
LAYER THICKNESS: 50u
CURE TIME: 8 SEC
WAIT BEFORE PRINT: 1.5 SEC
WAIT AFTER PRINT: 0.1 SEC
LIFT AFTER PRINT: 4 mm
WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 180 u/SEC

ANYCUBIC PHOTON

LAYER THICKNESS: 0.05 mm
NORMAL EXPOSURE TIME: 12 SEC
OFF TIME: 2 SEC
BOTTOM EXPOSURE TIME: 95 SEC
BOTTOM LAYERS: 5
SUPPORTS: preset medium

ANYCUBIC PHOTON S

LAYER THICKNESS: 0.05 mm
NORMAL EXPOSURE TIME: 8 SEC
OFF TIME: 3 SEC (don t affect the printing – it is a fake parameters on photon S)
BOTTOM EXPOSURE TIME: 45 SEC
BOTTOM LAYERS: 5
Z LIFT DISTANCE: 5 mm
Z LIFT SPEED: 1.5 mm/S
Z RETRACT SPEED: 1.2 mm/S
SUPPORTS: preset medium

ZORTRAX INKSPIRE

EXTRNAL MATERIAL – ADVANCED SETTINGS
LAYER THICKNESS: 0.05 mm
LAYER EXPOSURE TIME: 7.5 SEC
BOTTOM LAYER EXPOSURE TIME: 48 SEC
EXPOSURE OFF TIME: 2 SEC
BOTTOM LAYERS: 4
ADDITIONAL SUPPORTS EXPOSURE TIME: 1.5 sec
Z LIFT DISTANCE: 5 mm
PLATFORM SPPED (lower/lift): 75





POST-PRINTING CLEANUP

Clean the prints by pouring 91%/99% denatured alcohol (IPA) or ethyl alcohol 90%/99% (approximately 3 minute).

Dry and clean the pieces using a can of compressed air for best results.

UV Cure the models for 10 min with a 40 Watt lamp – 3 min with a 100 Watt lamp